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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,356	06/23/2003	Leonard Norman Schiff	990589	8905
23696	7590	09/09/2005	EXAMINER	
Qualcomm Incorporated Patents Department 5775 Morehouse Drive San Diego, CA 92121-1714			GESESSE, TILAHUN	
			ART UNIT	PAPER NUMBER
			2684	

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/602,356

Applicant(s)

SCHIFF, LEONARD NORMAN

Examiner

Tilahun B. Gesesse

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 16-19,30 and 31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 20-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of group I claims 1-15, 20-29 in the reply filed on July 11, 2005 is acknowledged. And non elected claims 16-19, 30-31 have been canceled.

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

((e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-15,20-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Wiedeman US patent No. 6,587,687.

Claim 1. Wiedeman teaches a method, (see figure 12) comprising:
Wiedeman teaches detecting a degraded link among a plurality of feeder links (see column 13, line 60-column 14, line 18 and figure 13) , said plurality of feeder links being

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between a satellite and a corresponding plurality of gateways(see column 13, line 60-column 14, line 18 and figures 12 and 13) and switching from the degraded link to a diversity link, said diversity link being between the satellite and a diversity gateway located outside a service area of the satellite (column 1, line 47-column2, line 18 and figures 1B and 12-13).

Claims 2 and 21-22, Wiedeman teaches all limitation as explained in claim 1.

Wiedeman further teaches measuring a degradation in a signal-to-noise ratio in a beacon signal received from the satellite at a particular gateway (column 15, lines 3-40) and

Wiedeman teaches recognizing that a feeder link corresponding to the particular gateway is the degraded link when the degradation exceeds a threshold ((column 15, lines 3-40).

Claim 3. Wiedeman teaches all limitation as explained in claim 1. Wiedeman further teaches sending a switch command from a gateway corresponding to the degraded link to the satellite (column 1, line 47-column2, line 18 and figures 1B and 12-13).

Claim 4, and 24 Wiedeman teaches all limitation as explained in claim 1. Wiedeman further teaches switching from the degraded link receiving a switch command at the

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satellite from a gateway corresponding to the degraded link (column 1, line 47-column2, line 18 and figures 1B and 12-13).

Claim 5, and 23 Wiedeman teaches all limitation as explained in claim 1.

Wiedeman further teaches switching from the degraded link re-routing data through the satellite to use a feeder horn corresponding to the diversity link rather than a feeder horn corresponding to the degraded link [column 15, lines 3-40].

Claim 6, 25-26 Wiedeman teaches all limitation as explained in claim 1.

Wiedeman further teaches detecting a plurality of additional degraded links among the plurality of feeder links; and switching from the plurality of additional degraded links to a plurality of additional diversity links, said plurality of additional diversity links being between the satellite and a plurality of additional diversity gateways located outside the service area [see column 1, line 47-column2, line 18 and figures 1B and 12-13].

Claim 7. Wiedeman teaches all limitation as explained in claim 1. Wiedeman further teaches: detecting that the degraded link has become a recovered link [column 1, line 47-column2, line 18 and figures 1B and 12-13] and switching back from the diversity link to the recovered link [see figure 1B].

Claim 8. Wiedeman teaches all limitation as explained in claim 1. Wiedeman further teaches the plurality of feeder links comprise at least one of a plurality of forward links and a plurality of reverse links (see figure 12).

Claim 9. Wiedeman teaches all limitation as explained in claim 1. Wiedeman further teaches the service area comprises the continental United States and the diversity gateway is located in one of Baja, California; Sonora, Mexico; Chihuahua, Mexico; British Columbia, Canada; and Alberta, Canada (see figure 12 in view figure 18).

Claim 10. Wiedeman teaches all limitation as explained in claim 1. Wiedeman further teaches detecting the degraded link comprises: measuring an instantaneous received signal strength (see column 15, lines 3-39).

Claim 11 Wiedeman teaches all limitation as explained in claim 1. Wiedeman further teaches the diversity gateway is located in an area of low probability of high rain intensity (see figure 4).

Claim 12, Wiedeman teaches all limitation as explained in claim 1. Wiedeman further teaches the 'diversity gateway is located within a full angular coverage of the satellite (see figure 4).

Claim 13. Wiedeman teaches all limitation as explained in claim 1. Wiedeman further teaches the plurality of feeder links carry Internet traffic and the corresponding plurality of gateways and the diversity gateway each comprises an Internet access point (weather data transmission , see figure 7).

Claim 14. Wiedeman teaches all limitation as explained in claim 1. Wiedeman further teaches each of the plurality of gateways supports K terminal beams (see figure 6, weather related data).

Claim 15. Wiedeman teaches all limitation as explained in claim 1. Wiedeman further teaches detecting the degraded link comprises: determining a signal strength of a feeder link beacon signal relative to received noise; and indicating that the feeder link is degraded if the signal strength is less than a threshold [column 15, lines 3-40].

Claim 20. it is a method claim, which corresponds to method claim 1 above. Therefore, it is analyzed and rejected for the same reason as set forth in the claim.

Claims 27-29, Wiedeman teaches all limitation as explained in claim 1. Wiedeman further teaches sending a switch command from a gateway corresponding to the degraded link to the satellite (column 1, line 47-column2, line 18 and figures 1B and 12-13).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Garrison et al US patent No. 5,924,015) teach satellite beams and feeder link and SNR feedback , see column 9, lines 47).

Von der Embse et al US patent No. 5,903,549, teach satellite beams and feeder link ground stations (see figure 1).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tilahun B Gesesse whose telephone number is 571-272-7879. The examiner can normally be reached on flex.

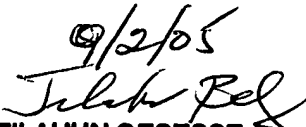
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882.

On July 15, 2005, the Central FAX Number will change to 571-273-8300. This new Central FAX Number is the result of relocating the Central FAX server to the Office's Alexandria, Virginia campus.

Most facsimile-transmitted patent application related correspondence is required to be sent to the Central FAX Number. To give customers time to adjust to the new Central FAX Number, faxes sent to the old number (703-872-9306) will be routed to the new number until September 15, 2005. After September 15, 2005, the old number will no longer be in service and 571-273-8300 will be the only facsimile number recognized for "centralized delivery".

CENTRALIZED DELIVERY POLICY: For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the Central FAX number, unless an exception applies. For example, if the examiner has rejected claims in a regular U.S. patent application, and the reply to the examiner's Office action is desired to be transmitted by facsimile rather than mailed, the reply must be sent to the Central FAX Number.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

9/2/05

TILAHUN GESESSE
PRIMARY EXAMINER